

## EAST Search History

| Ref # | Hits | Search Query  | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|---|---|------------------|---------|------------------|
| S1    | 4    | ("5765642" "6662874").PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/15 10:13 |
| S2    | 1827 | ((175/230) or (175/324) or (175/317) or (175/57)).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/06/15 10:54 |
| S3    | 1601 | ((166/305.1) or (166/142) or (166/318)).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/06/15 12:34 |
| S4    | 1    | ("2003/0121663").URPN.  | USPAT   | OR               | ON      | 2006/06/19 09:45 |
| S5    | 0    | (drill?string tool?string drillstring toolstring) with ((treat\$4 stimulat\$3) near (sub tool))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:19 |
| S6    | 9365 | (treat\$4 stimulat\$3 fractur\$3) near (sub tool)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:20 |
| S7    | 4    | S6 and (one?trip)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:23 |
| S8    | 0    | ((fractur\$3 (gravel adj pack\$3)) near5 (connected (part adj of) mated)) with (tool?string drill?string toolstring drillstring (drill adj bit))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:26 |
| S9    | 0    | ((fractur\$3 (gravel adj pack\$3)) near10 (connected (part adj of) mated)) with (tool?string drill?string toolstring drillstring (drill adj bit)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:30 |
| S10   | 8490 | well near2 (stimulat\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/06/19 14:58 |

## EAST Search History

|     |      |  |   |    |    |                  |
|-----|------|--|---|----|----|------------------|
| S11 | 8490 | S10 and ((stimulat\$3 treat\$4) (tool sub))                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 14:59 |
| S12 | 199  | S10 and ((stimulat\$3 treat\$4) near (tool sub))                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 15:36 |
| S13 | 442  | stimulat\$3 near3 drill\$3                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 15:36 |
| S14 | 135  | stimulating with drilling  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 16:03 |
| S15 | 7433 | treat\$4 with drilling   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 16:05 |
| S16 | 3989 | fractur\$3 with drilling   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 16:05 |
| S17 | 1712 | fracturing with drilling   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:17 |
| S18 | 1474 | ("166"/\$6.ccls. "175"/\$6.ccls.) and (fracturing same drilling) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:22 |
| S19 | 731  | ("166"/\$6.ccls. "175"/\$6.ccls.) and (fracturing with drilling) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:27 |
| S20 | 0    | fracturing near while near drilling                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:28 |

## EAST Search History

|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S21 | 0    | fracturing near (while near drilling)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:28 |
| S22 | 0    | fracturing near3 (while adj drilling)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:29 |
| S23 | 0    | treatment near3 (while adj drilling)      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:29 |
| S24 | 0    | stimulating near3 (while adj drilling)    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:32 |
| S25 | 5899 | fractur\$3 with (sub tool)                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:35 |
| S26 | 1335 | S25 and (drilling one-trip)               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:37 |
| S27 | 1054 | S25 and ("166"/\$6.ccls. "175"/\$6.ccls.) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 17:59 |
| S28 | 160  | S27 and (without with (trip\$4 out))      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:00 |
| S29 | 6    | S27 and (without with (trip\$4 adj out))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:11 |
| S30 | 9    | S27 and (one?trip)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:10 |

## EAST Search History

|     |        |  |   |    |    |                  |
|-----|--------|--|---|----|----|------------------|
| S31 | 73250  | treat\$4 near3 (sub tool section element)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:10 |
| S32 | 1049   | S31 and ("175"/\$6.ccls. "166"/\$6.ccls.)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:11 |
| S33 | 1      | S32 and (without with (trip\$4 adj out))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:12 |
| S34 | 4      | (treat\$4 adj during) adj drilling                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/19 18:13 |
| S35 | 12     | ("3233676"   "3235017"   "3373820").PN. OR ("3578078").URPN.           | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 09:57 |
| S36 | 248753 | (treat\$4 test\$3 fractur\$3) near3 (sub tool section element device)  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 09:59 |
| S37 | 16     | S36 and (without with (trip\$4 adj out))                               | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 10:03 |
| S38 | 1652   | S36 and (treat\$4 with drill\$3)                                       | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 10:04 |
| S39 | 141    | S36 and ((treat\$4 with drill\$3) with (while during simultaneous\$2)) | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 10:07 |
| S40 | 44     | S39 and ("166"/\$6.ccls. "175"/\$6.ccls.)                              | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 10:07 |
| S41 | 19     | ("3327781").URPN.  | USPAT   | OR | ON | 2006/06/20 10:18 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| S42 | 63 | (US-20050133226-\$ or<br>US-20050178558-\$ or<br>US-20040168800-\$ or<br>US-20030121663-\$ or<br>US-20050098351-\$ or<br>US-20060102344-\$ or<br>US-20060016623-\$ or<br>US-20050011678-\$).did. or<br>(US-6491098-\$ or US-3958641-\$ or<br>US-3892274-\$ or US-6029746-\$ or<br>US-6286600-\$ or US-5947200-\$ or<br>US-3578078-\$ or US-6343650-\$ or<br>US-3511120-\$ or US-2100420-\$ or<br>US-4310050-\$ or US-6006838-\$ or<br>US-5967233-\$ or US-5865254-\$ or<br>US-5476145-\$ or US-5174379-\$ or<br>US-5156207-\$ or US-4880056-\$ or<br>US-4969524-\$ or US-4778010-\$ or<br>US-4393927-\$ or US-4387770-\$ or<br>US-3185217-\$ or US-3101115-\$ or<br>US-3036634-\$ or US-3032117-\$).<br>did. or (US-3027943-\$ or<br>US-3012611-\$ or US-3007523-\$ or<br>US-4679630-\$ or US-4921044-\$ or<br>US-4842074-\$ or US-4304302-\$ or<br>US-3993130-\$ or US-2998066-\$ or<br>US-3517745-\$ or US-3527302-\$ or<br>US-3263751-\$ or US-1067868-\$ or<br>US-0657951-\$ or US-2377529-\$ or<br>US-3087549-\$).did. or<br>(US-3101115-\$ or US-2792894-\$ or<br>US-3007523-\$ or US-3361204-\$ or<br>US-3185217-\$ or US-3132694-\$ or<br>US-2377529-\$ or US-2354570-\$ or<br>US-3093192-\$ or US-2699832-\$ or<br>US-3233676-\$ or US-3529665-\$ or<br>US-3327781-\$).did. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/20 16:13 |
| S43 | 0  | S42 and (degradeable with sealant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:14 |
| S44 | 0  | S42 and (degradable with sealant)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:14 |
| S45 | 0  | S42 and (degradable with seal\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:15 |

## EAST Search History

|     |       |   |   |    |    |                  |
|-----|-------|---|---|----|----|------------------|
| S46 | 1     | S42 and polysaccharide                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:16 |
| S47 | 1096  | "166"/\$6.ccls. and ((treat\$4) and polysaccharide) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:18 |
| S48 | 73275 | treat\$4 near3 (sub tool section element)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:19 |
| S49 | 1050  | S48 and ("175"/\$6.ccls. "166"/\$6.ccls.)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:19 |
| S50 | 20    | S49 and (polysaccharide (degradable with seal\$4))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:39 |
| S51 | 0     | S49 and (paraffin same (degradable with seal\$4))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:39 |
| S52 | 0     | S49 and (paraffin and (degradable with seal\$4))    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:39 |
| S53 | 330   | S49 and (paraffin (degradable with seal\$4))        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:40 |
| S54 | 45    | S49 and (paraffin same (seal\$4 plug\$4))           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 16:41 |
| S55 | 3     | S42 and paraffin                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 17:16 |

## EAST Search History

|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| S56 | 12 | S42 and nozzle   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/20 17:16 |
| S57 | 63 | (US-20050133226-\$ or<br>US-20050178558-\$ or<br>US-20040168800-\$ or<br>US-20030121663-\$ or<br>US-20050098351-\$ or<br>US-20060102344-\$ or<br>US-20060016623-\$ or<br>US-20050011678-\$).did. or<br>(US-6491098-\$ or US-3958641-\$ or<br>US-3892274-\$ or US-6029746-\$ or<br>US-6286600-\$ or US-5947200-\$ or<br>US-3578078-\$ or US-6343650-\$ or<br>US-3511120-\$ or US-2100420-\$ or<br>US-4310050-\$ or US-6006838-\$ or<br>US-5967233-\$ or US-5865254-\$ or<br>US-5476145-\$ or US-5174379-\$ or<br>US-5156207-\$ or US-4880056-\$ or<br>US-4969524-\$ or US-4778010-\$ or<br>US-4393927-\$ or US-4387770-\$ or<br>US-3185217-\$ or US-3101115-\$ or<br>US-3036634-\$ or US-3032117-\$).<br>did. or (US-3027943-\$ or<br>US-3012611-\$ or US-3007523-\$ or<br>US-4679630-\$ or US-4921044-\$ or<br>US-4842074-\$ or US-4304302-\$ or<br>US-3993130-\$ or US-2998066-\$ or<br>US-3517745-\$ or US-3527302-\$ or<br>US-3263751-\$ or US-1067868-\$ or<br>US-0657951-\$ or US-2377529-\$ or<br>US-3087549-\$).did. or<br>(US-3101115-\$ or US-2792894-\$ or<br>US-3007523-\$ or US-3361204-\$ or<br>US-3185217-\$ or US-3132694-\$ or<br>US-2377529-\$ or US-2354570-\$ or<br>US-3093192-\$ or US-2699832-\$ or<br>US-3233676-\$ or US-3529665-\$ or<br>US-3327781-\$).did. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON | 2006/06/21 09:26 |
| S58 | 3  | S57 and (relative with permeability)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/06/21 09:26 |